

## Technical Data Sheet ( ISO )

# ABS(Acrylonitrile Butadiene Styrene) HGX4500

**Features** Ultra high heat resistance  
**Applications** Automobile parts, Mirror housing, Radiator grills, Rear lamp housings

| Physical                      | Test Method | Value       |
|-------------------------------|-------------|-------------|
| Specific gravity              | ISO 1183    | 1.06        |
| Melt Flow Index (220°C, 10kg) | ISO 1133    | 3 g/10min   |
| Water absorption              | ISO 62      | - %         |
| Mold Shrinkage                | ISO 294-4   | 0.5 ~ 0.8 % |

| Mechanical                   | Test Method | Value                |
|------------------------------|-------------|----------------------|
| Tensile Strength(at yield)   | ISO 527     | 41 Mpa               |
| Elongation(at break)         | ISO 527     | 17 %                 |
| Flexural Strength            | ISO 178     | 64 MPa               |
| Flexural Modulus             | ISO 178     | 2,300 Mpa            |
| Izod Impact Strength(23°C)   | ISO 180/1A  | 14 KJ/m <sup>2</sup> |
| Charpy Impact Strength(23°C) | ISO 179/1eA | 15 KJ/m <sup>2</sup> |
| Rockwell Hardness(R scale)   | ISO 2039-2  | 107                  |

| Thermal                                          | Test Method | Value  |
|--------------------------------------------------|-------------|--------|
| Heat Deflection Temperature(1.8Mpa, Unannealed)  | ISO 75-2    | 105 °C |
| Heat Deflection Temperature(0.45Mpa, Unannealed) | ISO 75-2    | 115 °C |
| Vicat Softening Temperature(B50)                 | ISO 306     | 120 °C |

| Flammability              | Test Method | Value |
|---------------------------|-------------|-------|
| Flame Rating - UL (1.6mm) | UL 94       | HB    |

### Notes

These are just typical properties, not specifications. Users should confirm results by their own test.